

SUBCOMMITTEE NO. 2

Outcomes

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<u>Item</u>	<u>Department</u>	<u>Page</u>
0540 Secretary for Resources		2
0555 Secretary for Environmental Protection.....		3
3900 Air Resources Board		5
3360 Energy Resources Commission		8
8660 Public Utilities Commission		13
3910 California Integrated Waste Management Board		17
3540 Department of Forestry and Fire Protection		18
3940 State Water Resources Control Board		19
3860 Department of Water Resources		20
8570 Department of Food and Agriculture		21

Resources—Environmental Protection—Energy

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0540 Secretary for Resources

1. Resources Agency Role in Climate Change

Agency Role. The Resources Agency has no statutory role in climate change response. However, many of the Resources Agency departments deal with issues that are closely connected to climate change, such as the Department of Forestry and Fire Protection's forestry management and the Energy Commission's renewable energy research work. The administration has been directing the Resources Agency into a new role as the researcher of climate change adaptation measures. These adaptation measures are the long-term response to how the state will have to adjust to different natural conditions caused by climate change. For example, the state is likely to have less snow pack in the Sierra, and the state must respond to that circumstance in order to ensure reliable drinking water for the long-term future.

Questions: The Agency should come to the hearing prepared to discuss:

- What is the role of the Resources Agency in the administration's climate change response?
- How is the position of the Assistant Secretary for Energy and Climate Change funded?
- How was the position of the Assistant Secretary for Energy and Climate Change created?
- What is the anticipated outcome of the Resources Agency's work on climate change? What product is the Resources Agency producing on climate change response?

Staff Recommendation. Staff recommends that the Subcommittee return to this issue on May 19 to consider how to more clearly define the role of the Resources Agency on climate change.

Action: No action taken

2. SB 97 Implementation

Background. The California Environmental Quality Act (CEQA) requires that development projects evaluate the project's impact on the environment and examine if negative environmental impacts can be feasibly mitigated. The CEQA process does not specify how greenhouse gasses (GHG) are to be regulated.

SB 97 (Dutton, 2007) was passed as part of the *2007-08 Budget Act* package. It mandates the Office of Planning and Research (OPR), by July 1, 2009, to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions under CEQA. The Resources Agency is then required to certify and adopt those guidelines by January 1, 2010. SB 97 sunsets on January 1, 2010.

Governor's Budget. The Governor's Budget proposes \$177,000 General Fund for two limited-term positions at the Resources Agency. Starting in 2009-10, the amount would increase to \$425,000 GF primarily due to an increase in contract funding. There is also a BBR to reduce the amount requested from \$177,000 to \$159,000 General Fund.

Staff Recommendation. Staff recommends the Subcommittee reject the budget proposal.

Action: Rejected proposal

Vote: 2-1 (Cogdill)

0555 Secretary for Environmental Protection

3. Western Climate Initiative and Other Multi-Jurisdictional Activities on Climate Change

Background. The Administration, and CAL-EPA, has devoted significant time and resources to regional and international activities to promote state climate change policies. While these activities may have some benefit in spreading the word relative to CA's GHG programs, it is unclear from the proposed budget how these activities are funded, what they entail, and what results they will provide.

For example:

1. China Agreement: The Secretary of CAL-EPA recently visited China for meetings with other officials on climate change. According to "blog" entries on the agency's website, "California has been asked to provide a climate program model to Chinese provincial governments and "California will help provide special technical training, support clean technology sharing and help build supportive public and private partnerships." Yet, it is unclear what state resources will be dedicated to this effort, and how they will be accounted for in the budget.
2. Western Climate Initiative and Related Activities: According to the CAL-EPA website, "There are a number of climate initiatives led by the administration: the Western Climate Initiative, The Climate Registry and the International Carbon Action Partnership. All are consistent with and complementary to the Global Warming Solutions Act of 2006. It will be essential to communicate with stakeholders and interested parties and facilitate their input into these initiatives."

The site describes the Initiative as an activity undertaken by the Western Governor's Association at which various states' Governors' staffs and other officials meet to discuss "regional climate change issues." It has been reported that the WCI is a forum for the formation of rules governing a regional cap and trade program and other activities. However, the budget provides no detail on the activities of the WCI, the expenditures in state government associated with those activities, or the expected outcomes, or the mechanisms by which the legislative branch of government can be involved in these activities.

3. Various Inter-Governmental Agreements among California and other states, National Governments: There apparently is no central location in which the Administration

catalogues the number, types, and details of the various agreements signed by the Administration and other states, countries, and other jurisdictions. However, according to the Governor's press release website, he and his Administration have signed climate change agreements with China (as noted above), Mexico, British Columbia, the UK, the European Union, Sao Paulo (Brazil), and the United Nations, among others.

These agreements often are referred to by the Administration as "historical," "first of its kind," and "major progress on reducing greenhouse gases." However, they are rarely accompanied by any substantive information regarding what actions each jurisdiction will take to reduce GHGs; the timeframe in which those actions will occur; how they will reduce greenhouse gases; or what fiscal resources will be used to implement their provisions.

It is an important part of California's efforts to reduce GHGs to ensure that other states, national governments, and international bodies are apprised of its activities. However, it is also important that these activities be accounted for in the budget, that emission reductions be properly measured, and the Legislature consulted on any agreements made on behalf of the state.

Staff Recommendation. Staff recommends that the Subcommittee request a list of all of the agreements with other states and countries that the administration has entered into.

Action: Requested a list from the Agency of all contracts with other states or nations from the passage of AB 32 on

Vote: No vote necessary for request

4. Greenhouse Gas Report Card

Background. Executive Order S-3-05 requires the Secretary for Environmental Protection to report biannually starting in 2006 on the impact of climate change on water supply, public health, agriculture, the coastline, and forestry, and shall prepare and report on mitigation and adaptation plans to combat these impacts.

The Legislature as part of the *2007-08 Budget Act* passed trailer bill language establishing an annual Greenhouse Gas Report Card with the purpose of establishing routine, quantified, verified, consistent, and public reporting of measures to reduce greenhouse gases and the effectiveness of those measures. The Greenhouse Gas Report Card includes information on:

- The list of measures that have been adopted and implemented by the state agency to meet greenhouse gases (GHG) emissions reduction targets;
- A status report on the actual GHG emissions reduced as a result of the measures taken;
- A list and timetable for adoption of any additional measures needed to meet GHG emission reduction targets; and
- Comparison of the actions taken and proposed to be taken by the individual state agencies and their projected GHG emission reductions against the state agency GHG emission reduction targets and statewide GHG emission reduction limits.

Staff Recommendation. Staff recommends that the Subcommittee add a requirement to the GHG Report Card for a cross-cut budget of AB 32 activities by department that includes all new proposals, base budget, and positions.

Staff further recommends that the Subcommittee add a requirement to the GHG Report Card for an inventory of all contracts and agreements that the administration, department, or agency has entered into with another state or country. The inventory should include the quantified emissions reductions from the agreements that are anticipated and how those emissions reductions will be enforced.

Action: Directed staff to write the trailer bill for a future vote

3900 Air Resources Board

5. Sustainability of Funding

History of Funding. The State has for years provided funding for reducing air emissions through programs such as Carl Moyer. These programs are special funded through fees that can only be used for the specific purposes of that program as defined by statute. Other programs such as the Climate Change Coordinating Council and AB 1493 (Pavley, 2002) also addressed greenhouse gas emissions.

The *2007-08 Budget Act* was the first time AB 32 implementation was funded. The 2007-08 funding level for AB 32 implementation was \$30.5 million primarily from the Air Pollution Control Fund with some funds coming from Proposition 84 bond funds, the Integrated Waste Management Account, and the Hazardous Waste Control Account. The funding for AB 32 was provided through loans from special funds that will have to be repaid.

The Governor's *2008-09 Budget* proposes \$55.5 million (\$30.5 million baseline) for all state agencies, including \$47 million for those agencies within Subcommittee 2, to implement AB 32. Of this amount, \$32 million would be a loan from the Beverage Container Recycling Fund to the Air Pollution Control Fund that would have to be repaid.

Administration's Funding Plan. The administration submitted to the Budget Committee a long-term funding plan for AB 32, as requested by Subcommittee 2 last year. The administration's long-term funding plan calls for continued loans from the Beverage Container Recycling Fund until 2010, when the ARB would place a fee on carbon emissions. These loans are placed into the Air Pollution Control Fund, which provides appropriations for the programs. The ARB thinks the extra time is needed in order to follow public procedure for fee schedule adoption.

Fee Authority. AB 32 provides the ARB with authority to adopt a schedule of fees to be paid by the sources of greenhouse gas emissions. The fees collected would be deposited into the Air

Pollution Control Fund and be available upon appropriation by the Legislature, for purposes of carrying out AB 32 implementation.

Reporting Regulations. The ARB already has information on which sectors are the greenhouse gas emitters of California and the amount of emissions that each of those sectors produces. Thus it is not difficult for the ARB to determine how to divide a fee on carbon emissions between those sectors.

Limited Use of Borrowed Funding. Staff recommends that the Subcommittee eliminate one-half of implementation funding for AB 32 (baseline and new funding) and replace that funding with fee revenue from AB 118 (Health and Safety Code Section 44273, Alternative and Renewable Fuel and Vehicle Technology Fund).

Action: Held open

6. Environmental Justice Advisory Committee

Background. The mission of the Environmental Justice Committee on the Implementation of the Global Warming Solutions Act of 2006 is to work cooperatively with all relevant bodies to provide the best possible advice to the California Air Resources Board on the development of the Scoping Plan called for by AB 32 and all other pertinent matters related to the implementation of AB 32. Through this advice the Committee seeks to provide helpful, workable recommendations on how best to ensure and encourage public engagement in the implementation of AB 32 and how best to reduce greenhouse gas emissions while maximizing the overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.

Staff Comments. The staff has become aware of criticism toward the Air Resources Board for not sufficiently incorporating the recommendations of the Environmental Justice Advisory Committee into the draft Scoping Plan. In addition, the staff position approved in the *2007-08 Budget Act* for the Environmental Justice Advisory Committee has not been filled.

Questions:

- Does the Environmental Justice Advisory Committee have access to the same staff and resources as the Economic and Technology Advancement Advisory Committee?
- Has the ARB devoted the proper level of staff and funding for environmental justice concerns in its developing of the Scoping Plan and in particular the cap-and-trade alternatives?

Action: None, informational item

7. Ongoing Implementation of the Global Warming Solutions Act of 2006

Background. Executive Order S-01-07 gave the Air Resources Board (ARB) the responsibility of developing a Low Carbon Fuel Standard (LCFS). Transportation accounts for more than 40 percent of California's greenhouse gas (GHG) emissions and the State relies on petroleum-based fuels for 96 percent of its transportation needs. The LCFS is intended to ensure that the mix of fuel in California will meet, on average, a declining standard for GHG emissions. On June 21, 2007, the ARB approved the LCFS as an early action measure and is on schedule to adopt an implementing regulation by the end of 2008.

Proposal. The requested funding would allow the ARB to work on the following:

Low Carbon Fuel Standard: The ARB is requesting 20 positions to develop test data on candidate low carbon fuels that currently do not exist. This data will allow the ARB to base regulations of LCFS on actual impacts of the fuels. In addition to testing, the ARB will also develop a life-cycle model for the various fuels. Two of the requested positions would work on evaluating the impact of using different diesel fuels, conducting lifecycle assessment, reviewing new technologies, and tracking emerging national and international programs. Three of the requested positions would work on analysis of the land use practices for biofuel production to ensure that the use of biofuel can be sustainable. Another two of the requested positions would implement a LCFS market program.

Laboratory testing is an important part of the LCFS regulations development process. The ARB would have eight of the requested positions work on exhaust and evaporative emissions testing. Five additional requested positions would be for analysis of emission, fuel, and particulate samples.

Scoping Plan and Early Action Measures: The ARB is requesting five positions to maintain an aggressive development schedule for the scoping plan and the early action measures.

Fee Revenue Mechanism: The ARB is requesting two positions to develop a fee program for the on-going support of AB 32 implementation and to pursue additional early action measures.

Governor's Budget. The Governor's budget proposes \$5,579,000 from the Air Pollution Control Fund and 27 new positions to continue implementation of AB 32 (Nunez, 2006).

Staff Recommendation. Staff recommends that the Subcommittee approve one-half of the requested funds from the Air Pollution Control Fund and one-half of the requested funds from the AB 118 (Health and Safety Code 44274.5, Air Quality Improvement Fund).

Action: Held open

3360 Energy Resources Commission

8. Cap and Trade Decision

Background. The Global Warming Solutions Act of 2006 (AB 32 Chapter 488, Statutes of 2006) requires the state Air Resources Board (ARB) to adopt rules to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas (GHG) emissions to achieve 1990 levels of those emissions.

The statute requires the ARB to adopt so-called “direct emission reductions” (i.e. pollution reductions made directly from and at a source) (See Health and Safety Code Section 38562). It authorizes, the use of so-called “market-based compliance mechanisms” such as cap and trade programs, but only after the ARB has met specified substantive and process requirements (see Part 5, commencing with Section 38570 and subdivision (k) of Section 38505). For example, under AB 32, any market system like cap and trade must:

1. Be verifiable and enforceable by state board (Health and Safety Code Section 38562(d)(1)).
2. Must achieve emission reductions that are “in addition to other GHG reductions (Health and Safety Code Section 38562(d)(2)).
3. Must achieve emission reductions that take place over same time period as would otherwise occur from direct emission reductions (Health and safety Code Section 38562 (d)(3)).
4. Must consider the mechanism’s effect on communities already adversely impacted by air pollution (e.g. environmental justice communities) (Health and Safety Code Section 38570(b)(1)).
5. Must prevent any increase in air pollution and toxic air contaminants (Health and Safety Code Section 38570 (b)(2)).
6. Must maximize “additional” environmental and economic benefits for CA (Health and safety Code Section 38570(b)(3)).

2006-2007 Executive Orders and Budget Actions. In the fall of 2006, several days after AB 32 was signed into law, the Governor issued an Executive Order which contained several provisions objectionable to the legislature (and inconsistent with the law). Among other things, the Executive Order established a Market Advisory Committee which convened and promptly recommended adoption of a cap-and-trade program without making the requisite findings or reviews required for the ARB under law.

In response to this and other actions, Legislature adopted clarifying language as part of the *2007-2008 Budget Act* to ensure the administration did not implement market mechanisms until it had complied with the law.

2008 CPUC/CEC Decision. In early 2007, the Public Utilities Commission (PUC) and Energy Commission (CEC) convened a joint proceeding to make recommendations to the ARB on actions that should be taken under AB 32 to regulate GHG emissions from the electricity and natural gas sectors. These actions apparently were taken in consultation with the ARB board and staff at the time though there was no express direction or authority in AB 32 for these agencies to undertake this effort.

Earlier this year, the CPUC and CEC jointly issued a decision recommending to the ARB that it adopt a “cap-and-trade” program to reduce greenhouse gas emissions from the electricity sector. In their decision, the two commissions gave scant attention to the substantive and process requirements under AB 32, and made no recommendations with regard to how the ARB might meet the conditions under law.

Moreover, the CPUC/CEC decision made little reference to the fact that GHG pollution reduction in the electricity sector will require a comprehensive strategy, beyond merely a cap and trade program, that includes meeting current renewable energy goals and extending those goals, increasing energy efficiency and taking other actions to reduce emissions.

Staff Recommendation. As noted above, the achievement of the GHG emission reduction targets will require a comprehensive effort within the electricity sector. The Administration’s apparent over-emphasis on one tool—cap and trade—when other tools like increasing renewable energy resources are lagging, suggests that there is a need to ensure budget resources are allocated more equitably to researching and implementing all GHG control measures.

In view of the Administration’s ongoing work on cap-and-trade mechanisms over other forms of GHG emissions control, the Subcommittee may wish to direct staff to identify those positions and resources in the budget that are being used by the energy agencies for cap and trade activities and further direct staff to develop budget bill language or trailer bill language to ensure that GHG emissions reductions from electricity sector are undertaken in a comprehensive manner.

Action: Directed staff to further work on this issue

9. Alternative and Renewable Fuel and Vehicle Technology Program

AB 118. AB 118 (Nunez, 2007) sets up an Alternative and Renewable Fuel and Vehicle Technology Program (Program) to be administered by the Energy Commission with the guidance from an advisory body. AB 118 requires the Energy Commission to develop an investment plan to determine priorities and opportunities for the Program, and to update the investment plan annually. The Energy Commission must provide grants, revolving loans, loan guarantees, loans, or other appropriate measures to a multitude of public and private agencies, organizations, and institutions to develop and deploy innovative technologies that transform California’s fuel and vehicle types to help attain the state’s alternative fuels and climate change policies.

Funding. The funding to implement AB 118 comes from increased fees for vehicle and boat registration, and an increase in the smog abatement fee. The Department of Motor Vehicles estimates that the revenue raised by the increased fee will be about \$118 million annually. The fee increase will sunset in 2016.

New Requirements. Implementing AB 118 will require the Energy Commission to:

- Administer at least \$100 million in awards issued annually, which will grow cumulatively as additional awards are issued
- Establish, staff, and act in accordance with guidance from an Alternative Fuels and Vehicles Advisory Board
- Develop Program criteria and project metrics
- Prepare and update annual Program reports
- Provide consumer outreach and workforce training on alternative fuels
- Provide incentives and technical support to increase the number of alternative fuel refueling stations throughout California, optimizing engine technologies for alternative fuels, alternative fuel production, and commercialization of alternative fuels and vehicles
- Measure and report on project outcomes
- Research how California can increase its in-state alternative fuel production and what barriers exist to prevent such an increase
- Research and outreach to all transportation fuel using sectors including the boating and locomotive engine industry to increase their awareness and use of alternative and renewable fuels
- Perform surveys to gather consumer preference information to determine what would influence consumers to use the alternative fuel in their dual-fuel vehicle

Governor's Budget. The Governor's Budget proposes \$100,891,000 from the Alternative and Renewable Fuel and Vehicle Technology Fund and six new permanent positions for implementation of AB 118. Of the amount requested, \$100 million would be for projects while \$891,000 would be for six positions and travel costs.

Staff Analysis. The Energy Commission is going to develop an Investment Plan for the AB 118 program that will define priorities for the program but not actual projects. The Investment Plan will be complete in the fall of 2008. Prior to the release of the Investment Plan it will be difficult for the Legislature to evaluate the direction of the program. Also, it will take about 6-8 months for the Energy Commission to develop regulations for the program. Because of the time required to create new regulations, it will be difficult for the Energy Commission to distribute \$100 million in grants in the budget year.

Staff Recommendation. Staff recommends that the Subcommittee approve \$891,000 for the positions and reject the \$100 million in program funding.

Action: Held open

10. California Building Energy Efficiency Standards Development

Background. Energy use in buildings is a significant source of California's greenhouse gas emissions. Building Energy Efficiency Standards deliver a very low cost means of saving energy. Over the last 30 years California's per capita consumption of energy has remained constant while the rest of the nation's has steadily increased. The current budget for this program is approximately \$4 million.

There is continual development of new technologies that can result in energy savings in buildings. Incorporation of emerging technologies as rapidly as possible into the Building Standards will call for more extensive analysis, including an expanded consideration of the cost savings arising from greenhouse gas emissions reductions in the cost effectiveness determinations for new Building Standards, and the development of a more goal-oriented approach for updating Building Standards.

Governor's Budget. The Governor's Budget proposes \$3,265,000 from the Energy Resources Programs Account and 12 new positions to develop, adopt, and implement additional standards for building energy efficiency standards in accelerated timeframes and increase the number of building features covered during each update cycle of the Building Standards. \$2 million of the requested funds would be for contracts.

Staff Analysis. The Energy Commission presents the Building Energy Efficiency Standards to the Building Standards Commission as recommendations for adoption into the overall building standards. The Building Standards Commission adopts new building standards only every three years. The latest building standards were adopted in early 2008, so no new standards will be adopted until 2011. Due to the difficult budget situation of the State, without prejudice staff finds it inadvisable to grow existing programs.

Staff Recommendation. Staff recommends that the Subcommittee reject the budget proposal.

Action: Rejected proposal

Vote: 3-0

11. Accelerate and Expand the Appliance Efficiency Standards Program

Background. The Climate Action Team identified appliance energy efficiency as an early-action strategy to meet the State's greenhouse gas reduction goals. The Energy Commission's Appliance Program is designed to increase the efficiency of appliances sold or offered for sale to California consumers and businesses. Under current statute, the Energy Commission is directed to develop, implement, and enforce standards which require either appropriate minimum efficiencies or maximum energy consumption allowances for each type of affected appliance.

California's appliance regulations require that manufacturers who submit certification data have their appliances tested at a laboratory approved by the Energy Commission. Each appliance is then recorded in an Energy Commission database, which includes data on manufacturer compliance with testing, efficiency standards, and certification for all regulated appliances as required by law.

Proposal. The requested resources would be used to develop, adopt, and implement new appliance efficiency standards in faster timeframes and increase the number of appliances addressed for standards in each update cycle. The positions requested would also be used to revise existing standards for appliances and increase the efficiency levels as appropriate. Appliances and equipment that would be addressed include:

- Lighting
- Battery chargers and internal power supplies
- Consumer electronics
- Commercial food service equipment
- Water-using equipment
- Heating and air conditioning equipment
- Portable spas, pool pumps
- Household standby devices, such as garage door openers and security systems

Governor's Budget. The Governor's Budget proposes \$911,000 from the Energy Resources Program Account and 5.5 new positions to work on the Appliance Efficiency Standards Program. \$200,000 of the requested funds would be for contracts.

This request would double the current Appliance Program budget.

Staff Recommendation. Staff recommends that the Subcommittee reject the budget proposal.

Action: Rejected proposal

Vote: 3-0

8660 Public Utilities Commission

12. Institute for Climate Solutions

Background. According to the budget and other documents provided by the Administration, there is upwards of \$300 million currently spend on various state research, development, and demonstration programs related to climate change, energy and related activities (not including federal funds and private funds).

Under the Public Interest Energy Research (PIER) Program, over \$100 million is collected in utility rates annually. An additional \$200 million plus per year is collected under the Alternative and Renewable Fuel and Vehicle Program. Additional ratepayer funds are devoted to solar energy research and other climate-related activities.

In addition, the chart on page 19, prepared by the Senate Office of Research, shows a number of the climate related research programs funded at the University of California (UC). This list is not a complete list.

CPUC Climate Institute. The Public Utilities Commission (PUC) on April 10, 2008 in rulemaking 08-04-039, created a new “Institute for Climate Solutions.” The commission did so by imposing a “surcharge” on utility ratepayers in the two-thirds of the state served by investor-owned utilities (the PUC has no authority over municipal service areas) totaling \$60 million per year and \$600 million over the ten year period specified in the decision. The decision was contested by various electricity ratepayer and consumer groups and is now on administrative appeal.

According to the commission decision, the Institute for Climate Solutions will be housed at the University of California is intended to address the impacts of climate change with strategies and programs in energy and environmental research, technology development and deployment, climate economics, infrastructure design, socioeconomic impacts and responses, education, public services, and policy action. The Institute for Climate Solutions intends to design a broad set of policies that target critical carbon-intensive sectors of California economy.

Legislative Counsel Opines that CPUC Action was Illegal. The Legislative Counsel has issued a 14 page written opinion stating that the CPUC’s decision to create the Climate Institute, and to impose a \$600 million rate increase to fund it, was illegal. Specifically, Counsel states in relevant part, “...the commission’s constitutional delegated authority does not empower the commission to create the [Climate Institute]. “Further the establishment of the [Institute] is inconsistent with the statutorily established scheme for energy research and development...”

PROJECT	FUNDING SOURCE	CAMPUS
California Climate Change Center and California Applications Program	California Energy Commission, Public Interest Research Program	UC Berkeley and Scripps Institution of Oceanography
Carbon Cycle Research Center	Foundation grant	UC Irvine
San Diego Supercomputer Center		UC San Diego and Lawrence Livermore National Laboratory
Climate Research Division		Scripps Institution of Oceanography
ZEV-NET (Zero Emission Vehicle-Network Enabled Transport)	City of Irvine, Toyota, Irvine Company, National Fuel Cell Research Center	UC Irvine
Institute of Transportation Studies		UC Davis
Center for Information Technology in the Interest of Society		UC Berkeley, Davis, Merced, Santa Cruz
Energy Biosciences Institute	BP	UC Berkeley, Lawrence Berkeley National Laboratory, University of Illinois
The Helios Project		Lawrence Berkeley National Laboratory
Institute of Geophysics and Planetary Physics		UC Berkeley, Irvine, Los Angeles, Riverside, San Diego, Santa Cruz, Los Alamos National Laboratory, Lawrence Livermore National Laboratory
Bioenergy Research Group	Chevron Corporation	UC Davis
Kearney Foundation of Soil Science	Endowment program	Systemwide
Hydrogen Engineering Research Consortium	Private Industry	UCLA
National Fuel Cell Research Center	US Department of Energy and California Energy Commission	UC Irvine
Climate Change and Carbon Management		UC Berkeley and Lawrence Berkeley National Laboratory

Commission's Action Inequity to Ratepayers. In addition to the rather apparent legal issues with the commission's action, there is the question of whether something as broad-based as climate change research should be funded through the imposition of a \$600 million rate increase applicable only to private utility ratepayers. If additional funding for climate change research is needed, and utility rates are the fund source, it would seem that the program should be funded from all ratepayers in the state, and not merely a subset of those ratepayers.

Commission Created other "off-budget" entities, with no Legislative Authority or Scrutiny, in Recent Years. The Commission's order creating the Climate Institute is the latest in a series of ratepayer-funded entities created by commission order for purposes not specified or authorized in statute, and overseen principally by the commission itself. For example, the Commission has created a renewable energy fund overseen by an ex-commission staff, a telecommunications/broadband non-profit headed by a former Administration official.

Governor's Budget. The Governor's Budget does not include funds for this Climate Institute. The account from which the institute is funded is off-budget. The cost of the Climate Institute is \$60 million annually for ten years, for a total of \$600 million to be paid by ratepayers.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

1. Bring the Public Utilities Commission's off-budget account for this purpose (and any other off-budget accounts for similar activities in the telco and energy sectors, on budget so that the Legislature may review their expenditures and administration in detail.
2. Adopt budget bill or trailer bill language as appropriate directing the commission to suspend any further activity on the climate institute until/unless authorized under law by the Legislature.
3. Reduce the Commission's administrative budget by \$60 million.

The Subcommittee voted on the actions individually:

Action 1: Brought the Public Utilities Commission's off-budget account for this purpose (and any other off-budget accounts for similar activities in the telco and energy sectors, on budget so that the Legislature may review their expenditures and administration in detail.

Vote on Action 1: 2-1 (Cogdill)

Action 2: Adopted budget bill or trailer bill language as appropriate directing the commission to suspend any further activity on the climate institute until/unless authorized under law by the Legislature.

Vote on Action 2: 3-0

Action 3: Reduced the Commission's administrative budget by \$60 million

Vote on Action 3: 3-0

13. Advocating for Cost-Effective Strategies to Reduce Greenhouse Gas

Background. AB 32 (Nunez, 2006) requires the Air Resources Board to consult with the Public Utilities Commission (PUC) and the Energy Commission in the development of greenhouse gas (GHG) emissions reduction measures applied to electricity and natural gas providers. In response to this legislative directive, the PUC promulgated rulemaking 06-04-009.

The Division of Ratepayer Advocates (DRA) has a statutory role to pursue the lowest possible rates for its customers. In relation to AB 32, the ARB will provide input to both the PUC and the Energy Commission on their design of recommended climate change policies for the electric sector, advocating for programs that will achieve the state's climate change goals cost-effectively. The alternative approaches under consideration will have significant effects on electricity markets in the state and in the western part of the United States, as well as on ratepayers. DRA seeks to ensure that the electric sector customers bear only their fair share of GHG reductions commensurate with the burdens that should be shared by other sectors such as transportation.

Position Justification. DRA argues that they need an additional position to address climate change because the PUC has established numerous parallel proceedings under tight schedules in order to provide the ARB with information needed to implement AB 32. DRA evaluates the rate consequences of the alternative policies being pursued by the PUC and the Energy Commission and makes recommendations to both on mitigating the most severe rate impacts on customers.

Governor's Budget. The Governor's budget proposes \$102,000 from the Public Utilities Commission Ratepayer Advocate Account and one position to allow effective, independent analysis, advocacy and review of alternative reporting and regulatory regimes, alternative market approaches, and the economic effects on markets and ratepayers to comply with AB 32.

Staff Recommendation. Staff recommends that the Subcommittee approve the budget proposal.

Action: Approved as budgeted

Vote: 2-1 (Cogdill)

3910 California Integrated Waste Management Board

14. Update on Progress

Current Activities. The California Integrated Waste Management Board (CIWMB) is working on a number of activities intended to reduce greenhouse gas emissions. These include:

- The Landfill Methane Capture Strategy was adopted as a discrete early action measure in June 2007. The measure will require owners and operators to install gas collection and control systems at smaller and other uncontrolled landfills that are currently not required to install emission controls and include requirements to increase landfill methane capture efficiencies.
- Industry outreach on increasing the efficiency of landfill methane capture. CIWMB is developing a guidance document to assist municipal landfill owners and operators by providing information on different technologies and management practices they can use at their sites to reduce greenhouse gas emissions.
- Expand outreach efforts to increase awareness of AB 1969. Under AB 1969 electrical corporations are required to purchase, at a Public Utilities Commission approved price, renewable energy output from public water and wastewater facility projects with an effective capacity of not more than 1.5 megawatts, up to a total program capacity of 250 megawatts.
- Help expand production of liquefied natural gas by helping to fund commercial-scale projects. CIWMB has provided grant funding for two projects on recovery of landfill methane that is otherwise flared.
- Increase recycling from the commercial sector by focusing on voluntary implementation approaches.
- Increase production and markets for compost in order to divert organic material from landfills and provide a reduction of greenhouse gases through a landfill methane avoidance.
- Increase fuel and energy production from anaerobic digestion of green waste.
- Fund waste technology demonstrations, assessments, and development in order to expedite the deployment of greenhouse gas-reducing technologies by providing funding that assists developers in demonstrating their technology on a commercial scale.
- Extended producer responsibility as a strategy to place a shared responsibility for end-of-life product management on the producers, and all entities involved in the product chain, instead of the general public.

Action: No action, informational item

3540 Department of Forestry and Fire Protection

15. Climate Change

Proposal. The Fire and Resources Assessment Program (FRAP) maintains information on the condition and availability of forest and rangeland resources. The information produced by FRAP has been previously used in carbon sequestration assessment. FRAP would receive two positions to update the vegetation maps to detect changes in forests, woodlands, and open space.

The California Forest Improvement Program (CFIP) activities include preparation of management plans, site preparation, tree planting, and follow-up work. CFIP provides cost-share grants to private forest landowners of up to 5,000 acres. Approximately 765,000 acres of projects have been funded under this program since 1980.

The State Nursery Program provides seedlings for replanting forests. Historically the program has functioned out of two facilities which sell over 300,000 seedlings a year. The department calculates that this proposal would provide an additional 400,000 container seedlings a year.

The Environmental Protection Program currently has one position that supports and coordinates other CALFIRE programs in implementing climate change mitigation activities, acts as a liaison to the Air Resources Board on AB 32 implementation, and works with the California Climate Action Registry in developing a new forestry protocol for urban forestry.

Governor's Budget. The Governor's Budget proposes \$4,388,000 from Proposition 84 bond funds and 13 positions for implementation of forest and rangeland activities to mitigate climate changes in urban watersheds by reducing greenhouse gas emissions.

Staff Recommendation. Staff recommends that the Subcommittee hold this item open.

Action: Held open

16. Proposition 84 Local Assistance – Urban Greening

Background. Proposition 84, Chapter 9, Section 75065 (a), provides \$90 million for urban greening. Of that amount, a minimum of \$20 million is reserved for the Department of Forestry and Fire Protection for urban greening programs. The goals of the Department of Forestry and Fire Protection urban greening program are:

- Increase the amount of urban forests
- Facilitate the creation of jobs in tree maintenance and related urban forest activities
- Reduce energy consumption through maximized tree and vegetative cover
- Encourage the coordination of state and local activities in urban forestry
- Prevent and limit the spread of tree diseases and pests

Governor's Budget. The Governor's Budget proposes \$5,395,000 from Proposition 84 bond funds for the second year of the urban greening program.

Staff Recommendation. Staff recommends that the Subcommittee hold this item open.

Action: Held open

3940 State Water Resources Control Board

17. Climate Change

Background. The nine Water Boards regulate the allocation and use of waters in California. The development, conveyance, treatment and discharge of water is one of the greatest energy intensive processes in California. Energy production and use is a significant source of greenhouse gas (GHG) emissions, and a reduction in GHG emissions could be achieved with improvements to water conveyance, treatment, management, discharge, and allocation.

State Water Board Activities. As part of this proposal, in order to reduce GHG emissions from California's water system, the Water Board staff will identify and quantify GHG resulting from activities performed in compliance with Water Board regulations, programs, and policies, and formulate strategies and measures, including revisions to statutory, regulatory, and program policies. In addition, staff will work on maintenance of the Water Board climate change web page, information dissemination, communication and collaboration among participants, and reporting to the Water Board, public, and other entities. The urban water conservation best management practices, which have not been updated in 20 years, will be updated as part of this proposal.

The Water Board proposes to undertake pilot studies to implement, monitor, and evaluate the effectiveness of new strategies before deployment on a regional or statewide scale. These pilot projects would be implemented as partnerships with local agencies and stakeholders. The Water Boards also intend to evaluate their policies, regulation, and permits to establish effective regulatory strategies to ensure maximum use of water resources.

Positions Requested. The positions requested would work on the following areas:

- 2.6 PY – Climate Change Coordination – participation on the CAT subgroups, coordination with Department of Water Resources on climate change efforts such as water conservation, and maintenance of internet and intranet resources.
- 0.4 PY – Climate Change Studies – focus on adaptation strategies to issues such as saltwater intrusion and implementation of successful elements statewide.
- 1 PY – Water Conservation Initiative – develop best management practices for urban and agricultural water, evaluate the implementation of water conservation measures, and work with stakeholders.

Governor's Budget. The Governor's Budget proposes \$428,000 from the Waste Discharge Permit Fund and four positions to develop and implement both adaptation responses for water quality changes expected to occur due to global climate change and strategies to reduce greenhouse gas emissions resulting from water use, treatment and control activities subject to the Water Board's regulatory authority.

Staff Recommendation. Staff recommends that the Subcommittee reject the budget proposal.

Action: Rejected proposal

Vote: 3-0

3860 Department of Water Resources

18. Multi-Benefit Planning and Feasibility Studies

Background. The California Energy Commission calculates that the operation of water supply and wastewater systems throughout the State accounts for about 18 percent of the State's total use of electric power and 30 percent of non-power plant natural gas use in the State. Electric generation is a major contributor to greenhouse gas emissions. For example, the California Water Plan projects that agricultural and urban water conservation efforts can lead to 1.5 to 3 million acre feet per year of conserved water by the year 2030.

Proposal. With this proposal, the Department of Water Resources intends to identify potential system redesign alternatives that would reduce the greenhouse gas emissions related to the operation of the water system. The department would also conduct work on the interrelationship of water management and flood control activities as well as their relationship to the natural environment. As part of the California Water Plan effort, the department would generate products to guide investment in water resources and support integrated regional planning efforts. The department would also continue the feasibility studies for three surface storage projects.

Funding Breakdown. For 2008-09, the Department of Water Resources requests the following:

- Climate Change Evaluation, Mitigation, and Adoption: \$2 million, 7 new positions, and 3 existing positions
- Water Transfers and Promotion of Urban and Agricultural Water Conservation: \$1,791,000, 2 new positions, and 8.2 existing positions
- Completion of CALFED Surface Storage Studies: \$6 million and 5.2 existing positions
- Integration of Flood Management and Water Supply Systems: \$1,393,000, one new position, and two existing positions
- Implementation of California Water Plan Recommendations: \$2.6 million, one new position, and 5 existing positions
- Development of a Delta Vision and a Strategic Plan: \$2 million and two positions

Governor's Budget. The Governor's Budget proposes \$61,725,000 in Proposition 84 bond funds over five years and 11 new positions and 66.2 existing positions. The funding requested for 2008-09 only is \$15,784,000. These funds would be for integrated multi-benefit planning and feasibility studies related to California's future water needs.

Staff Recommendation. Staff recommends that the Subcommittee reject this budget proposal.

Action: Rejected proposal

Vote: 2-1 (Cogdill)

8570 Department of Food and Agriculture

19. Update on Progress

2007-08 Budget. In the *2007-08 Budget Act*, the Department of Food and Agriculture was provided \$331,000 from the Department of Food and Agricultural Fund to establish and support 2.0 positions that will research and identify greenhouse gas reduction strategies through dairy methane capture programs.

Current Activities. The California Department of Food and Agriculture (CDFA) has addressed climate change primarily through participation in various discussion and planning forums. CDFA is the lead agency for the Climate Action Team agriculture sub-group, which has developed a number of recommendations submitted to the ARB Scoping Plan due in January 2009. These recommendations include carbon sequestration, methane capture, and renewable energy.

One of the discussion forums on climate change that CDFA is participating in is the Biomass Collaborative, a statewide collaboration of government, industry, environmental groups, and educational institutions administered for the state by the University of California.

Staff Comments. Because of conflicting interpretations of statute, the Department felt that it did not have authority to use the Agricultural fund for the positions provided by the Legislature. As such, these positions have not been filled. To continue work on Agriculture related GHG reduction strategies, the Department used existing staff and additional resources provided by the Agricultural industry to support dairy methane capture and biogas energy related programs. Currently the agricultural sector is being asked to voluntarily provide carbon savings.

Action: Requested quarterly updates to the Committee on the CDFA's actions on climate change and resources allocated to climate change related work.

Vote: Request only, no vote necessary